RANGE OF LACE BUG GENUS *ACALYPTA* (HETEROPTERA: TINGIDAE) EXTENDED SOUTH INTO NEOTROPICS WITH DISCOVERY OF THE NEW SPECIES, *A. EMICATA*, FROM GUATEMALA[1]

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ABSTRACT: The new species *Acalypta emicata* is described and illustrated from an adult male intercepted on a species of *Tillandsia* being imported into the United States from Guatemala. Included is a key to the seven New World species of *Acalypta* with a single pronotal carina.

A specimen of *Acalypta* Westwood intercepted on an unidentified species of the plant genus *Tillandsia* (family Bromeliaceae) being imported into the United States from Guatemala is interesting not only as a new species but also for extending the range of this genus into the Neotropics, one country farther southward than its previous limiting record from Mexico. As is true for the Mexican record, also based on a specimen intercepted on imported plants of the genus *Tillandsia*, a precise locality of origin for the specimen is not known. The discovery of this specimen, unfortunately, does not answer the question was this, and possibly other members of the moss-feeding genus *Acalypta* intercepted with introduced plants of *Tillandsia*, originally biologically associated with the *Tillandsia* plant or were they actually in moss that may have been used for packing during shipping? The latter is most likely. The cryptic moss-frequenting habit of the *Acalypta* species undoubtedly shields them from being collected more frequently.

Acalypta emicata NEW SPECIES

Figure 1

Diagnosis: Among the New World species of *Acalypta* with only one longitudinal carina (the median) on the pronotum, this species can be recognized by having the combination of the hypocostal lamina uniseriate for its full length and the costal area biseriate for nearly its full length (unevenly so on holotype, see illustration and description below).

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Description: Measurements in millimeters. Brachypterous male holotype: obovate, widest near midlength of hemelytra. Length 2.1. Color black, dorsally with narrow margins of paranota and costal areas distinctly lighter brown; ventrally with anterior margin of propleuron, narrow edge of buccula, and tibiae light brown, sternal carinae almost white.

Head with supraclypeal spines strong, straight, parallel, slightly surpassing midlength of first antennal segment. Antennophore not projecting forward. Antennal segments stout, lengths of segments, I-IV, 0.10 : 0.07 : 0.35 : 0.27; segment III cylindrical, not widened at ends. Labium reaching base of second visible abdominal segment.

Pronotum with anterior margin forming a weakly tectate, bluntly triangular projection extending to anterior margins of eyes. Median carina irregularly uniseriate at middle, lower toward each end. Lateral carinae absent. Paranotum triseriate, almost twice as wide as an eye, lateral margins weakly convex.

Costal area with cells prominent, biseriate for nearly or quite entire length (on holotype the right side wholly biseriate, the left side biseriate with middle third uniseriate, latter apparently a developmental anomaly). Outer limiting veins of discoidal area coarctate in basal third, in lateral view strongly, convexly elevated along basal two-thirds; inner limiting vein weakly elevated, evanescent basally. Hypocostal lamina uniseriate.

Holotype: Brachypterous male, "intercepted on *Tillandsia* sp. from Guatemala; U.S.A - Texas, Houston, Dec. 7, 1993, Q. Johnson." Deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

The species name is from the Latin *emico* and means to appear suddenly — that is, it was unexpected.

When Froeschner (1976) discussed the *Acalypta* species of the New World, he treated four as having a single carina on the pronotum. Subsequently three more American species of *Acalypta* with unicarinate pronotum have been discovered: *A. susanae* Allen *et al* (1988) from Arkansas, *A. laurae* Froeschner (1991) from Mexico, and now *A. emicata* from Guatemala, described above. Their morphological characters will not allow them to be fitted into Froeschner's (1976: Fig. 6) diagram and require that it be modified. Such a modification is here offered in the form of the following key:

Key to American species of *Acalypta* with a single pronotal carina

1. Head with a pair of elongate, stout, subhorizontal tubercles arising above base of clypeus .. 2
----- Head without elongate tubercles above base of clypeus .... *mniophila* Drake & Ruboff
2. Antennal segment III black, stout, cylindrical, for full length nearly or quite as wide as segment II .... *emicata* new species
----- Antennal segment III mostly pale, thickening basad or clavately dilating toward apex (not cylindrical) 3
3. Antennal segment III clavate, thickening from base to apex. Hypocosta triseriate .... *susanae* Allen *et al*
----- Antennal segment III thinnest on apical half. Hypocosta uniseriate or biseriate basally and uniseriate apically 4

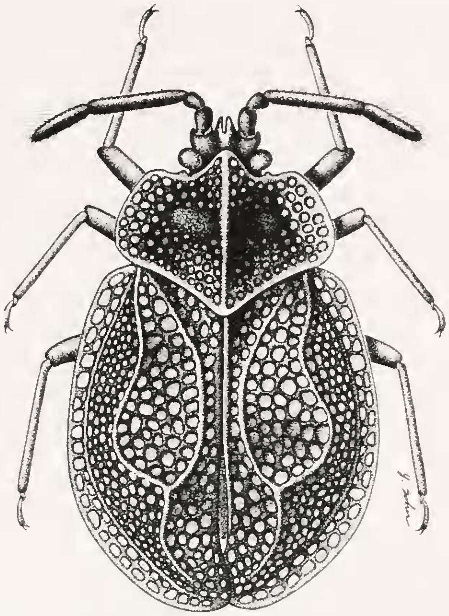

Figure 1. *Acalypta emicata* n. sp., natural length 2.1 mm.

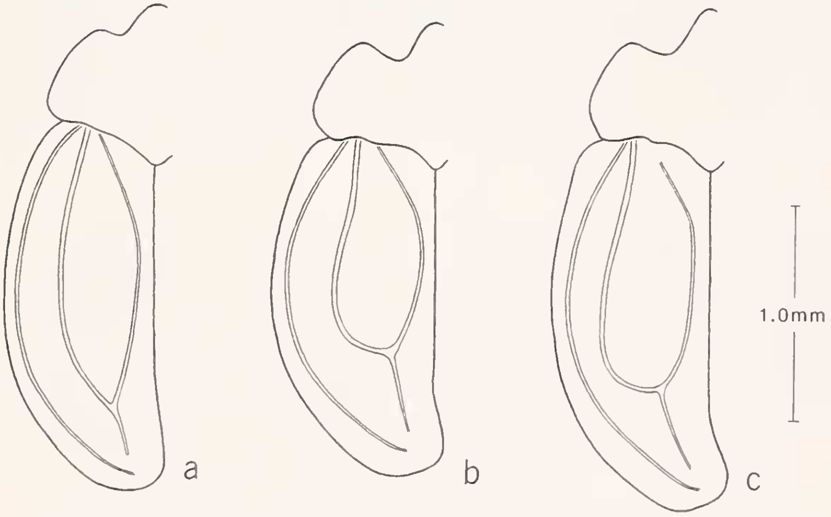

Figure 2. *Acalypta* hemelytra: a) *A. saundersi*; b) *A. laurae*; c) *A. ruhoffae*.

4. Outer and inner limiting veins of discoidal area joining near apical fourth of hemelytron to form an acute angle (Fig. 2a) .... *saundersi* Downes

----- Outer and inner limiting veins of discoidal area joining near apical third of hemelytron and not forming an acute angle 5

5. Discoidal area with limiting veins distinctly embrowned, strongly contrasting with the pallid veins of discoidal and subcostal areas; its outer limiting vein convexly projecting posterolaterally, forming an almost continuous arc with inner limiting vein (Fig.2c) .... *ruboffae* Froeschner

----- Discoidal area with limiting veins light brown, virtually concolorous with other veins of hemelytron; its outer limiting vein less strongly convex posterolaterally, forming a slightly obtuse or right angle with inner limiting vein (Fig. 2b) 6

6. Hypocosta uniseriate for full length .... *laurae* Froeschner

----- Hypocosta biseriate in basal fourth to third, uniseriate posteriorly .... *duryi* Drake

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